

**ABSTRACT OF THE DISCLOSURE**

The present invention provides a method and apparatus for detecting and locating a fault in an integrated circuit structure formed in one or more insulating layers deployed on a semiconductor substrate. The apparatus includes a probe tool capable of detecting a fault in the integrated circuit structure, a laser tool capable of forming an electrical connection between the integrated circuit structure and the semiconductor substrate, and a controller coupled to the probe tool and the laser tool, wherein the controller is capable of directing the laser tool to form the electrical connection between the integrated circuit structure and the semiconductor substrate in response to detecting the fault in the integrated circuit structure. The apparatus also includes a source for providing an electrical charge to the integrated circuit structure in response to detecting the fault in the integrated circuit structure and a detector for detecting an electrical charge accumulation in at least a portion of the integrated circuit structure.